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following this the motor is incrementally energized to move the actuator to the loading position at step 168. Although any time period can be set, in an exemplary embodiment a time period of five seconds may be used. In this embodiment, the motor shaft is uni-directional. In other words, the motor is not reversible.

At step 170 the controller inquires as to whether the timer has expired or not. If the timer has not expired then at step 170 the controller inquires as to whether the actuator is at the loading position or not as determined by the actuator. If it is determined that the actuator is not at the loading position, then the methodology at step 174 requires the user to remove the refill container. Upon completion of step 174 the methodology returns to step 168 and the motor is incrementally energized to move the actuator, and steps 170 and 172 are repeated. If at step 170 it is determined that the timer is expired, then the controller turns the motor off at step 178. Alternatively, if at step 170 it is determined that the timer has not expired, but that the actuator is at the loading position at step 172, then the motor is turned off. Upon completion of step 178 the process, at step 180, returns to main operation when the front cover is closed as determined by the sensor 20.

This methodology is advantageous in that the dispensing system can be configured to automatically jog or rotate the motor shaft upon opening of the front cover. The motor then gives power somewhat continuously until the actuator is returned to the proper position. If the pump is stalled, the actuator will not return to its loading position until the stalled pump and refill container are removed. If the pump is not stalled, then the motor shaft rotates and then shuts off since the actuator is in the correct position from the last cycle of the pump actuator. Regardless of whether the pump was stalled or not, the actuator would be left in the proper position to accept a new refill container. The timer feature prevents battery drain.

Accordingly, based on the foregoing methodologies it will be appreciated that various scenarios can be utilized to reset the pump actuator to a loading position so that a stalled pump can be easily corrected without damage to the refill container or the occurrence of undesired dispensing events. This saves on loss of fluid from the refill container and also prevents possible damage to the operating mechanism of the dispensing system.

Thus, it can be seen that the objects of the invention have been satisfied by the structure and its method for use presented above. While in accordance with the patent Statutes, only the best mode and preferred embodiment has been presented and described in detail, it is to be understood that the invention is not limited thereto or thereby. Accordingly, for an appreciation of the true scope and breadth of the invention, reference should be made to the following claims.

What is claimed is:

1. A method for resetting a stalled pump in a fluid dispensing system, the method comprising:
  - determining whether a refill container is received in the dispensing system; and
  - moving a pump actuator to a loading position when said refill container is removed.
2. The method according to claim 1, wherein the dispensing system includes a housing with a front cover, and wherein said refill container is receivable in the housing, the method further comprising:
  - detecting whether the front cover is open prior to the determining step; and
  - starting a timer prior to the determining step.

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3. The method according to claim 2, wherein said refill container is provided with a detectable key readable by the dispensing system, the method further comprising:

reading said detectable key to determine whether said refill container is received in the dispensing system.

4. The method according to claim 3, further comprising: repeating the reading step until said timer expires or until it is determined that said refill container is removed from said housing.

5. A method for resetting a stalled pump in a fluid dispensing system comprising:

starting a run timer;

starting a pump actuator;

determining whether said pump actuator is still dispensing fluid from the fluid dispensing system upon lapsing of said run timer; and

moving said pump actuator in an opposite direction to a loading position if the pump actuator is still dispensing upon expiration of said run timer.

6. The method according to claim 5, further comprising: detecting the presence of a user's hand to start said run timer.

7. The method according to claim 5, further comprising: detecting the presence of a user's hand to start said actuator.

8. The method according to claim 5, further comprising: associating said pump actuator with a motor having a motor shaft so that rotation of said motor shaft moves said pump actuator in one direction and reversal of said motor shaft moves said pump actuator in an opposite direction.

9. The method according to claim 8, further comprising: returning to a main operation routine after said run timer has expired and determining that said motor shaft is no longer rotating.

10. A method for resetting a stalled pump in a fluid dispensing system comprising:

detecting opening of a cover;

energizing a motor to move a pump actuator to a loading position;

determining when said actuator is at said loading position; and

turning said motor off.

11. The method according to claim 10, further comprising: starting a timer prior to energizing said motor; and turning said motor off if said timer expires.

12. The method according to claim 11, further comprising: removing a refill container from the dispensing system if said timer has not expired and said pump actuator is not at said loading position.

13. The method according to claim 12, further comprising: energizing said motor after said refill container is removed to move said pump actuator to said loading position while said timer has not yet expired.

14. The method according to claim 13, further comprising: turning said motor off if said pump actuator is at said loading position.

15. A dispensing system comprising:

a refill container filled with product;

a housing adapted to accept said refill container;

a pump maintained by either said refill container or said housing so as to dispense product from said refill container, wherein said pump has a loading position and a dispensing position; and

an electronic keying mechanism associated with said pump wherein said electronic keying mechanism is configured